

\*RoHS COMPLIANT



**BOURNS®**

### Features

- Multiple applications: parallel, series, dual-inductor and transformer
- Magnetically shielded, low radiation
- Inductance range: 0.47 to 4000  $\mu$ H
- Rated current up to 17.9 A
- RoHS compliant\*

### Applications

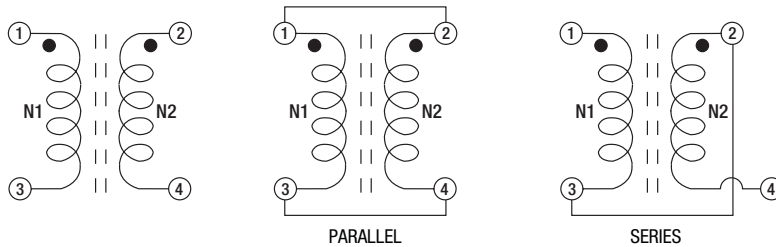
- SEPIC topology
- Power supplies for:
  - Communication equipment
  - Notebooks, desktop computers, servers
  - LCDs, flat panels, backlights
  - Camcorders, HDTVs, car audio systems

## SRF1280 Series - Dual-Winding Shielded Power Inductors

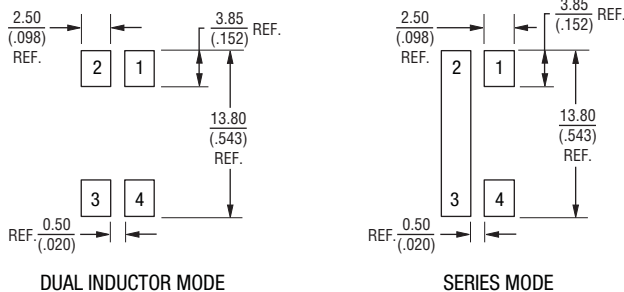
### Electrical Specifications @ 25 °C

Bourns Part No.	Parallel Rating				Series Rating			
	Inductance @ 100 KHz L ( $\mu$ H) $\pm 20$ %	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Inductance @ 100 KHz L ( $\mu$ H) $\pm 20$ %	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
SRF1280-R47M	0.47	0.0055	17.9	56	1.88	0.0216	8.94	28
SRF1280-1R0M	1.0	0.0067	15.5	40	4	0.026	7.74	20
SRF1280-1R5M	1.5	0.0076	13.5	31.1	6	0.0306	6.77	15.6
SRF1280-2R2M	2.2	0.0092	12.5	25.5	8.8	0.0338	6.23	12.7
SRF1280-3R3M	3.3	0.011	10.4	21.5	13.2	0.04	5.23	10.8
SRF1280-4R7M	4.7	0.0135	8.25	16.5	18.8	0.05	4.13	8.24
SRF1280-6R8M	6.8	0.0183	7.34	13.3	27.2	0.0656	3.67	6.67
SRF1280-8R2M	8.2	0.0191	6.32	12.2	32.8	0.0714	3.16	6.09
SRF1280-100M	10	0.0241	6.04	11.2	40	0.0921	3.02	5.6
SRF1280-150M	15	0.0333	5.03	9.66	60	0.129	2.51	4.83
SRF1280-220M	22	0.0503	4	7.57	88	0.192	2	3.78
SRF1280-330M	33	0.0664	3.23	6.22	132	0.265	1.61	3.11
SRF1280-470M	47	0.0898	2.95	5.28	188	0.353	1.47	2.64
SRF1280-680M	68	0.123	2.44	4.44	272	0.469	1.22	2.22
SRF1280-820M	82	0.153	2.09	4.06	328	0.578	1.04	2.03
SRF1280-101M	100	0.175	1.96	3.64	400	0.701	0.98	1.82
SRF1280-151M	150	0.261	1.59	3.01	600	1.013	0.796	1.51
SRF1280-221M	220	0.343	1.29	2.43	880	1.38	0.645	1.22
SRF1280-331M	330	0.54	1.04	2.01	1320	2.172	0.522	1.01
SRF1280-471M	470	0.865	0.85	1.68	1880	3.3	0.427	0.838
SRF1280-681M	680	1.296	0.76	1.39	2720	4.888	0.38	0.697
SRF1280-821M	820	1.632	0.65	1.27	3280	5.896	0.325	0.633
SRF1280-102M	1000	1.992	0.61	1.14	4000	7.202	0.307	0.571

### Electrical Schematic



### Recommended Layout



### General Specifications

Test Voltage ..... 0.25 V  
 Hi-pot ..... 500 Vrms, 3 mA, 3 sec.  
 Reflow Soldering .. 230 °C; 50 sec. max.  
 Operating Temperature  
 ..... -40 °C to +105 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Solder Heat  
 ..... +260 °C for 10 sec.

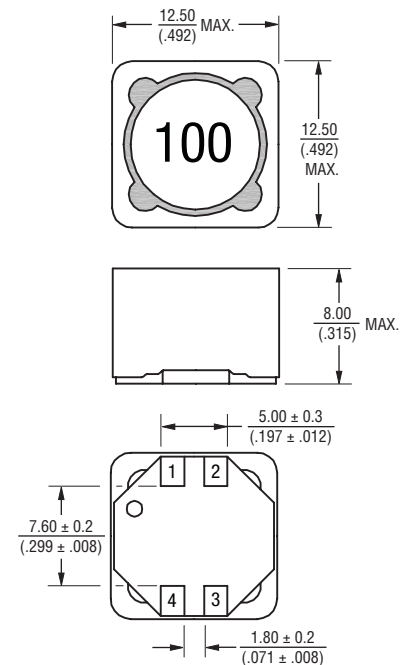
### Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Base ..... LCP  
 Adhesive ..... Epoxy resin  
 Terminal ..... Cu/Ni/Sn  
 Rated Current  
 ..... Inductance drops 30 % at I<sub>sat</sub>  
 Temperature Rise .... 40 °C at rated I<sub>rms</sub>  
 Packaging ..... 400 pcs. per 13-inch reel

### How to Order

**SRF1280 - 100M**  
 Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

### Product Dimensions



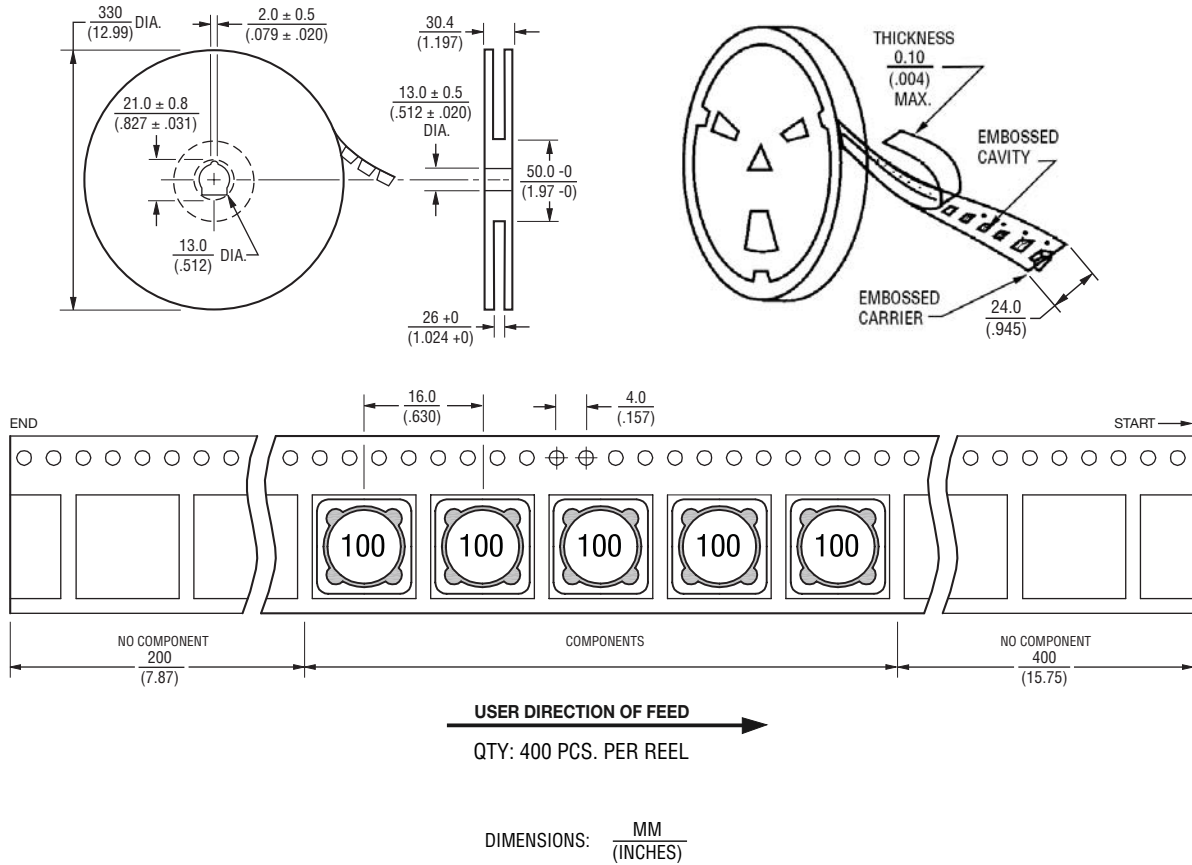
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex. Specifications are subject to change without notice. Customers should verify actual device performance in their specific applications.

# SRF1280 Series - Dual-Winding Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



**BOURNS®**

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